

REMARKS

Objections to the Specification

The Office Action at page 2, paragraph 1, has objected to the disclosure because of the following informalities: On page 7, line 11, "ethylene bis-steramaide" is believed to be a typo and should be changed to "ethylene bis-stearamide" and that appropriate correction is required.

Applicants have amended the specification at page 7, lines 5-12, by correcting the spelling of ethylene bis-stearamide at page 7, lines 7-8, and page 7, lines 11-12.

Claim Objections

The Office Action at page 2, paragraph 2, has objected to claims 4-10 under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. The Office Action has indicated MPEP § 608.01(n). The Office Action has further indicated that accordingly, claims 4-10 have not been further treated on the merits.

Applicant has submitted with the present Amendment copies of a Preliminary Amendment filed July 22, 2004 that amends claims 1-10 and adds new claims 11-22. The Preliminary Amendment removes the multiple dependencies. Applicant has also submitted a copy of the Notice of Acceptance of Application under 35 U.S.C. 371 and 37 CFR 1.495 that indicates that the Preliminary Amendment filed on July 22, 2004 was received by the U.S. Patent and Trademark Office. Applicant respectfully suggests that the Preliminary Amendment should have been entered and that the amended claims of the Preliminary Amendment should have been examined. Applicant respectfully requests that the twenty-two (22) claims of the Preliminary Amendment be entered and examined.

**Claim rejections under 35 U.S.C 103(a) as being unpatentable over
Syrier et al. in view of Dempsey et al.**

Claims 1-3 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Syrier et al. ("Syrier") (U.S. Patent No. 4,629,754) in view of Dempsey et al. ("Dempsey") (International Publication Number WO 00/73378 A1). Applicant respectfully traverses the rejections. Reconsideration and withdrawal of the rejections are respectfully requested in view of the amendments and remarks.

The Office Action at page 3, paragraph 5, indicates that Syrier discloses a "binder composition" which is pigmentable and that Syrier is silent as of including an amide additive in the "pigmentable binder composition". The Office Action further indicates that the prior art to Dempsey discloses a mixture comprising a "bitumen composition" wherein the formulation of the "bitumen" includes a polymer and 0.05% to 10% of an amide additive. The Office Action further indicates that Dempsey further teaches that "asphalt binders" containing the invented mixture can have significant lower viscosity at process and lower handling temperatures than polymer systems not containing the amide additive. The Office Action further indicates that Dempsey herein explicitly discloses the benefits of including the amide additive in the "bitumen composition".

The Office Action, in the paragraph bridging pages 3 and 4, then further indicates that accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the amide additive as taught by Dempsey in Syrier's formulation for the pigmentable binder composition in order to take advantage of lowering temperatures for field mixing, material transfer, and plant storage therefrom to obtain savings in energy requirements as taught by Dempsey. The Office Action at page 4 further indicates that with regard to the limitation of the pigmentable binder composition for use in synthetic asphalt, Syrier discloses that their binder compositions are light-colored and therefore pigmentable, so that the ultimate mineral aggregate-, filler-, or pigment-containing asphaltic composition can be used for marking purposes by means of colored overlays over asphaltic concrete base courses of roads which reads on applicants' limitation for the composition's use.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2142.

Applicant's specification, in the paragraph bridging pages 1 and 2, discloses that pigmentable binder compositions based upon non-bituminous constituents such as resins, lubricating oils, lubricating oil extracts and polymers have been developed. Pigmentable binders are defined as non-bituminous binders that may be coloured by the addition of pigments or coloured aggregate. Whilst the chemical composition of pigmentable binders is very different to bitumen, pigmentable binders have rheological properties similar to those of bituminous binders but have the advantage that they may be pigmented into a wide range of colours. Applicant's specification at the bottom of page 3 further discloses that the present invention provides a pigmentable binder composition for use in synthetic asphalt, which composition comprises a resin, a lubricating oil and/or a lubricating oil extract.

In addition, Applicant's Examples 1-3 in Applicant's specification at pages 11-14 disclose several binder compositions comprising "Mexphalte CP2" and "EBS". As disclosed in Applicant's specification at page 11, lines 10-16, Mexphalte CP2 is a commercial polymer-modified pigmentable binder comprising a modified petroleum resin, a Bright-Stock furfural extract, and polymeric components. As disclosed in Applicant's specification at page 11, lines 17-19, EBS is a commercial ethylene bis-stearamide.

Applicant respectfully suggests that there is no motivation to modify or combine the Syrier "pigmentable binder composition" with the Dempsey "bitumen composition" to arrive at Applicant's claimed composition. Applicant respectfully suggests that Syrier and Dempsey are related to two different types of compositions. Applicant respectfully suggests that the Office Action is using improper hindsight to

combine the Syrier pigmentable binder composition that does not anticipate, disclose, or suggest an amide additive with the Dempsey bitumen composition to arrive at Applicant's claimed composition. Applicant respectfully suggests that only with improper hindsight based on Applicant's disclosure would one skilled in the art with the Syrier disclosure of a pigmentable binder composition look for an amide additive in the Dempsey disclosure of a bitumen composition.

Applicant also respectfully suggests that only with improper hindsight could Applicant's weight percent ranges be rendered obvious. Syrier discloses weight percents of components of Syrier's pigmentable binder composition that do not anticipate, disclose, or suggest an amide additive. See, for example, Syrier column 2, line 35 - column 3, line 37. Dempsey discloses weight percents of components of Dempsey's bitumen composition such as bitumen, polymer, and amide additive. See, for example, Dempsey Abstract, Dempsey page 4, lines 1-5, and Dempsey page 5, lines 22-25. Applicant respectfully suggests that only with improper hindsight based on Applicant's disclosure could one combine the two references related to different types of compositions to render obvious Applicant's amide additive and the weight percents of components of Applicant's pigmentable binder composition.

The Office Action at page 4 indicates, as to claim 2, that Syrier's formulation for the pigmentable binder composition can include more than one resin which suggests another polymer can be included. The Office Action at page 4 indicates that also, as to claim 2, Dempsey admits that in order to meet the specific temperature requirement, the properties of conventional bitumen compositions can be modified by the addition of polymers and a wide variety of polymers have been used as additives in bitumen compositions, such as copolymers derived from styrene and conjugated dienes. The Office Action further indicates in the paragraph bridging pages 4 and 5 that accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate another polymer, as taught by Dempsey, in Syrier's formulation for the pigmentable binder composition in order to meet the temperature requirement as taught by Dempsey.

Applicant respectfully suggests that Syrier's formulation for the pigmentable binder composition does not anticipate, disclose, or suggest Applicant's amide additive. Applicant also respectfully suggests that the Dempsey disclosure regarding

polymers relates to conventional bitumen compositions. Applicant respectfully suggests that the Office Action is using improper hindsight based on Applicant's disclosure to combine the Syrier pigmentable binder composition with optional polymers with Dempsey's disclosure of polymer addition to conventional bitumen compositions to arrive at Applicant's claimed composition.

As to claim 3, the Office Action at page 5 indicates that Syrier teaches that the petroleum resins, one of the components of the pigmentable binder composition, are obtained by treating the resins with unsaturated carboxylic acids or anhydrides and the modified petroleum resins may have acid values of 1-100 mg KOH/g which is within applicant's range. Applicant respectfully suggests that claim 3 depends from claim 1. As discussed herein, Syrier does not anticipate, disclose, or suggest an amide additive and that only with the use of improper hindsight can one combine Syrier with Dempsey to arrive at Applicant's claimed composition. Thus, Applicant respectfully suggests that the discussion herein related to claims 1 and 2 apply to claim 3 as well and that claims 1, 2, and 3 are not anticipated, disclosed, or suggested by Syrier or Dempsey, alone or in combination.

In addition, the objective evidence present in Applicant's application indicates the nonobviousness of Applicant's claimed invention. For example, pages 13 and 14 of Applicant's application disclose that from Table 1 it can be seen that the pigmentable binders according to the invention (Examples 1-3) have very similar penetration values to the untreated pigmentable binder (Comparative Example A). Further, it can be seen that the synthetic mastic asphalt compositions prepared from these binders have an improved workability; the temperature to which the synthetic mastic asphalt compositions according to the invention need to be heated being in the order of 20 °C lower than those required to attain the same workability with the comparative compositions.

CONCLUSION

Applicant respectfully requests entry of the Preliminary Amendment filed July 22, 2004 and examination of the claims of the Preliminary Amendment. Applicant further respectfully requests reconsideration and withdrawal of the objections to the specification and claims. Applicant further respectfully requests reconsideration and withdrawal of the claim rejections under 35 U.S.C. 103(a). Applicant further respectfully requests entry and consideration of the above amendments and remarks to advance the above-identified application to allowance.

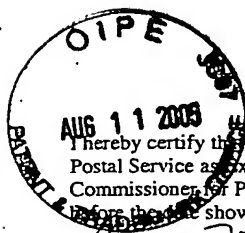
Respectfully submitted,

EIVIND OLAV ANDERSEN

By: 

Attorney, Reece A. Scott
Registration No. 41,297
(713) 241-7256

P.O. Box 2463
Houston, Texas 77252-2463



TS9284 US
YIW:BAF

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail EV325951067US in an envelope addressed to Commissioner for Patents, Box PCT, Alexandria, VA 22313-1450 on or before the date shown below.

Barbara Fisher

Barbara Fisher

Date: 22 July 2004

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PCT International Application of)
)
ANDERSEN, Eivind, Olav)
)
Int. Appl No.: PCT/EP03/00585)
)
Int. Filing Date: 21 January 2003)
)
PIGMENTABLE BINDER COMPOSITION) 22 July 2004

COMMISSIONER FOR PATENTS
Box PCT (DO/EO/US)
Alexandria, VA 22313-1450

Dear Sir:

PRELIMINARY AMENDMENT UNDER 37 CFR 1.115

Prior to taking up the case for examination, please amend the application as follows:

ABSTRACT

Please add the following abstract:

A pigmentable binder composition for use in synthetic asphalt is provided containing a resin, a lubricating oil and/or a lubricating oil extract, and in the range of from 0.05 to less than 3 % wt based on total composition of an amide additive of general formula: $R^1-CO-N-(CH_2)_x-N-CO-R^2$ wherein R^1 and R^2 each independently represent alkyl groups having in the range of from 10 to 60 carbon atoms, and x is an integer in the range of from 1 to 4. A synthetic asphalt containing a mixture of aggregate and such pigmentable binder composition is also provided.

SPECIFICATION AMENDMENTS

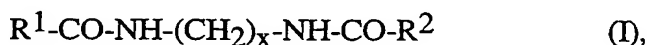
On page 1, above line 1, insert--Field of the Invention--

On page 15, above line 1, insert --We claim:--

CLAIM AMENDMENTS

Amend claims:

1. (currently amended) A ~~[[P]]~~ pigmentable binder composition for use in synthetic asphalt, ~~which said~~ composition comprising a petroleum resin, a lubricating oil and/or a lubricating oil extract, and in the range of from 0.05 to less than 3 % wt based on total composition of an amide additive of general formula:



wherein R^1 and R^2 each independently represent alkyl groups having in the range of from 10 to 60 carbon atoms, and x is an integer in the range of from 1 to 4.

2. (currently amended) The ~~[[P]]~~ pigmentable binder composition ~~as claimed in~~ of claim 1, ~~which~~ further comprising a polymer.

3. (currently amended) The ~~[[P]]~~ pigmentable binder composition ~~as claimed in~~ of claim 1 ~~or claim 2~~, wherein the resin is an acidic resin, having an acid value in the range of from 0.5 to 200 mg KOH/g.

4. (currently amended) The ~~[[P]]~~ pigmentable binder composition ~~as claimed in any one of claims 1 to 3~~ wherein the resin is a modified petroleum resin comprising carboxylic acid, carboxylic acid anhydride or hydroxyl groups.

5. (currently amended) The ~~[[P]]~~ pigmentable binder composition ~~as claimed in~~ of claim 4 ~~[[,]]~~ wherein the resin is a modified petroleum resin obtainable by treating a petroleum resin with maleic anhydride.

6. (currently amended) The ~~[[P]]~~ pigmentable binder composition ~~as claimed in any one of claims 1 to 5~~, wherein the lubricating oil and/or lubricating oil extract is a Bright-Stock extract.

7. (currently amended) The ~~[[P]]~~ pigmentable binder composition ~~as claimed in any one of claims 1 to 6~~, wherein the amide additive of general formula (I) is an ethylene bis-stearamide.

8. (currently amended) ~~The [[P]]pigmentable binder composition as claimed in any one of claims 1 to 7, which comprises in the range of from~~ wherein the petroleum resin is present in an amount of 1 to 70 % wt of a petroleum resin; 20 to 97 % wt of a the lubricating oil and/or a the lubricating oil extract is present in an amount of 20 to 97 % wt ; 0.1 to less than 3 % wt of an the amide additive of general formula (I) is present in an amount of 0.1 to less than 3 % wt; and optionally a polymer is present in the range of from 1 to 15 % wt of a polymer, all weights based on total composition.
9. (currently amended) ~~A [[S]]synthetic asphalt comprising a mixture of aggregate and a the pigmentable binder as claimed in any one of claims 1 to 8.~~
10. (currently amended) ~~Use of a A synthetic mastic asphalt comprising the pigmentable binder composition as claimed in any one of claims 1 to 8 in synthetic mastic asphalt.~~
11. (new) The pigmentable binder composition of claim 2 wherein the resin is an acidic resin, having an acid value in the range of from 0.5 to 200 mg KOH/g.
12. (new) The pigmentable binder composition of claim 2 wherein the resin is a modified petroleum resin comprising carboxylic acid, carboxylic acid anhydride or hydroxyl groups.
13. (new) The pigmentable binder composition of claim 12 wherein the resin is a modified petroleum resin obtainable by treating a petroleum resin with maleic anhydride.
14. (new) The pigmentable binder composition of claim 2 wherein the lubricating oil and/or lubricating oil extract is a Bright-Stock extract.
15. (new) The pigmentable binder composition of claim 11 wherein the lubricating oil and/or lubricating oil extract is a Bright-Stock extract.
16. (new) The pigmentable binder composition of claim 2 wherein the amide additive of general formula (I) is an ethylene bis-stearamide.

17. (new) The pigmentable binder composition of claim 11 wherein the amide additive of general formula (I) is an ethylene bis-stearamide.
18. (new) The pigmentable binder composition of claim 12 wherein the amide additive of general formula (I) is an ethylene bis-stearamide.
19. (new) The pigmentable binder composition of claim 14 wherein the amide additive of general formula (I) is an ethylene bis-stearamide.
20. (new) The pigmentable binder composition of claim 2 wherein the petroleum resin is present in an amount of 1 to 70 % wt, the lubricating oil and/or the lubricating oil extract is present in an amount of 20 to 97 % wt, the amide additive of general formula (I) is present in an amount of 0.1 to less than 3 % wt, and the polymer is present in the range of from 1 to 15 % wt, all weights based on total composition.
21. (new) A synthetic asphalt comprising a mixture of aggregate and the pigmentable binder of claim 2.
22. (new) A synthetic mastic asphalt comprising the pigmentable binder composition of claim 2.

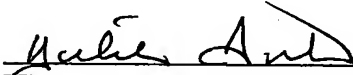
REMARKS:

The claims have been amended to conform to US practice. If it would be considered helpful in resolving any issues in the case, the Examiner is encouraged to contact the undersigned at the number below.

Respectfully submitted,

ANDERSEN, Eivind, Olav

P.O. Box 2463
Houston, Texas 77252-2463



His Attorney, Yukiko Iwata
Reg. No. 35,748
(713) 241-5593